An Outline of the Development

OF THE

Internal Commerce of the United States

1789-1900

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AN OUTLINE OF THE DEVELOPMENT OF THE INTERNAL COMMERCE OF THE UNITED STATES, 1789-1900[1]

I

1789–1830

At the beginning of the national era the internal commerce of the United States gave small promise of the tremendous development it was to undergo during the ensuing century. There was as yet too little differentiation of occupation to give rise to a large interstate trade in native products, and the proximity of the greater part of the population to the seacoast made it cheaper and more convenient to carry on the small interstate trade that did exist by means of small sailing vessels plying along the coast. Practically all the internal trade was devoted to bringing the surplus agricultural produce of the interior to the seaport towns where it was exchanged for imported wares that could not be produced by the inhabitants of the inland region.

As is usual in a new country, the settlers who had first pushed into the interior had founded their new homes close to the rivers, and these natural highways had always been and still were the most important means of transportation to and from the seacoast. At the mouths of the larger streams flowing into the Atlantic Ocean were to be found large and wealthy cities, where enterprising men were laying the foundations of large fortunes in a rapidly growing trade in the agricultural and forest products floated down from the interior.

[1] In this paper, which is a brief abstract of a work to be published later, an attempt is made to outline the history of the development of the internal commerce of the United States after the formation of the Union in 1789. The term "internal commerce," though in its fullest signification embracing every purchase, sale, and exchange of commodities between the individuals of a country together with the business of transmitting intelligence and of transporting persons and things from place to place, is here used primarily as applying to the interchanges of commodities among the various sections of the United States carried on over interior lines of transportation—the rivers, highways, canals, lakes and railroads.

Living close along the ocean where numerous excellent harbors and long stretches of sheltered water gave ample facilities for the little inter-colonial trade that existed, and where rivers afforded natural means of transportation from the interior to towns on the coast, the people of early colonial days had not found it necessary to give much time to the construction of roads. The gradual inland movement of the population had finally compelled them, however, to give some attention to the means of land transportation and many rude earth roads were built to replace the old Indian trails. These roads were unspeakably poor, sloughs of mire during the thaws of winter and spring and thick with dust in the summer, but bad as they were they carried considerable traffic and their use was constantly growing. Inland towns were beginning to grow up at the focusing points of the country roads, and the owners of general stores at such places derived large profits out of their position as middlemen between the farmers of the interior and the merchants at the nearest seaports. Three great roads had been built into the western country, one up the Mohawk Valley into western New York, and two across the Alleghany Mountains, the Pennsylvania Road from Philadelphia to Pittsburgh, and the Wilderness Road over which the early settlers of Kentucky had threaded their way up the Shenandoah Valley and through Cumberland Gap to the southern banks of the Ohio River.

The transportation facilities of the times were, however, entirely inadequate to the needs of the country, and the lack of better means of getting products to market was a serious impediment to internal development. Tench Coxe wrote in 1792: "To a nation inhabiting a great continent not yet traversed by artificial roads and canals, the rivers of which above their natural navigation have hitherto been very little improved, many of whose people are at this moment closely settled upon lands, which actually sink from one-fifth to one-half of the value of their crops in the mere charges of transporting them to seaport towns, and others, of whose inhabitants cannot at present send their produce to a seaport for its *whole* value, *a thorough sense of the truth of the position* is a matter of *unequalled* magnitude and importance."

Especially was communication between the Ohio Valley and the outside world difficult and expensive. The natural outlet for the surplus of this valley was the Mississippi River. During the Revolutionary War, the Spanish government had given the people of the colonies the right of free navigation of the river and a brisk trade had

sprung up between the western settlements and New Orleans, but in 1784 Spain had put an end to this trade by withdrawing the right of free navigation. The people of the West, enraged at being deprived of what they considered their natural right, protested furiously and appealed to Congress for protection, but their appeals were unavailing and the river remained closed for more than a decade. The only market left to the western farmers was the cities on the eastern coast. Peltry, ginseng and whiskey were almost the only products that would pay their cost of transportation to Philadelphia, and the proceeds derived from the sale of these were sufficient to purchase only a few things of prime necessity such as salt, gunpowder, and some indispensable articles of iron. Even this small trade of the West was crippled when the new government placed an excise tax on whiskey, and the resentment felt against the federal authorities for their apparent disregard of the economic interests of the western people blazed forth in open rebellion.

The commercial isolation of the Ohio Valley ended, however, in 1795, when the national government, spurred to action by the threats of secession and clamor for protection coming from the western farmers, secured a treaty with Spain opening the Mississippi River to navigation. The successful conclusion of the negotiations was hailed with great rejoicing in Tennessee, Kentucky, Pennsylvania and Ohio. Fleets of flat-boats loaded with tobacco, pork, flour, grain and whiskey began to move down the river. In 1799, more than a million dollars worth of goods were received at New Orleans from the country up the Mississippi. In October, 1802, the Spanish Intendant at New Orleans, acting on his own responsibility, suddenly withdrew the "right of deposit" at the city, and contrary to the provisions of the treaty, he refused to assign an equivalent establishment at any other place on the banks of the river. The western people were wild with rage. It was necessary to send troops to Kentucky to prevent an armed expedition against the Spanish province. Fortunately, the Spanish government disavowed the action of the Intendant and in April, 1803, the river trade was again restored. Desirous of avoiding such difficulties in the future, Jefferson pushed the negotiations already begun with Napoleon, to whom Spain had ceded her claims to Louisiana, for the purchase of New Orleans and the territory through which the river flowed from the possessions of the United States to the Gulf of Mexico. The negotiations ended in October, 1803, with a wholly unexpected result—the purchase of the entire

Louisiana province. In December, the United States took possession of the newly acquired territory and the undisputed control of the Mississippi was secured forever.

The opening of the Mississippi marked the beginning of an active internal commerce within the United States. The farmers of the Ohio Valley, which was now being rapidly settled, found an outlet for their heavy agricultural produce, and consequently secured a purchasing power, enabling them to buy manufactured goods and merchandise, which, notwithstanding the distance and the inferior roads, could be carried to them in wagons from the East. Though the produce of the western farmers was shipped down the Mississippi, very few of their supplies were brought up the river, because of the difficulty of urging a flat-boat against the powerful current of the stream. This triangular trade of the Ohio Valley grew rapidly. The receipts at New Orleans, in 1807, including the cotton, sugar and molasses of Louisiana, which made up a third of the total, amounted to $5,370,555. The money for which the products of the West were exchanged at New Orleans was almost invariably spent for manufactured and imported wares from eastern cities. Large Conestoga freighters made regular trips from Philadelphia to Pittsburgh bringing loads of hats, boots, powder, lead and clothing which were distributed from the "Gateway of the West" among the towns and villages down the river. Baltimore and New York also shared in the western trade.

The internal commerce of the country in 1810, as in 1790, was greatly handicapped by the high costs of transportation. Taking the country over, the charges for transporting merchandise were $10 per ton per 100 miles and articles that could not stand this rate were shut from market. Grain and flour could not bear transportation by wagon more than 150 miles. The lack of commercial intercourse caused many sections to develop local economic and political interests which endangered the unity of the nation. "The question of the hour was plainly how to counteract this tendency by a system of interstate commerce which should unite them by a firm bond of self interest."[1] Gallatin's report on internal improvements in 1808 reflects the plans and ambitions that were in the minds of the commercial and political leaders of the country, but unfortunately the foreign controversies in which the United States became involved at that time prevented any attempt to carry out his proposals.

[1] J. B. McMaster, *A History of the People of the United States*, vol. iii, p. 465.

The war of 1812 brought a period of unsettled commercial conditions. Domestic industry and trade were stimulated for a time, but a sharp financial panic in 1814 caused a year of general depression. The return of peace early in 1815 was followed by a quick revival of business, and the next three years brought an era of prosperity to nearly everyone except the manufacturers along the eastern coast, many of whom were ruined on account of a deluge of importations from Europe.

Immigration to the West set in with renewed vigor after the close of the war. The fertile soil of the Ohio Valley contributed an enormous product of grain, tobacco, fruit and hemp which continued to find an outlet down the Mississippi, and the farmers increased their purchases of imports which flowed into Pittsburgh from the East. In 1811 Fulton's invention was introduced in western waters, and in 1817 the first steamboat voyage was made from New Orleans to Louisville. The effect of this new engine of commerce on the Mississippi trade was almost magical. In 1818–19, the first year after the steamboat became an assured success, the receipts at New Orleans rose to 136,300 tons, valued at $16,778,000, and the volume of exports of domestic products from the southern port was greater than that from any other port of the country.

But even more important to the commercial prosperity of the West than the introduction of the steamboat was the spread of cotton culture into the Southern States west of the Appalachian highland. Cotton culture had been found exceedingly profitable in Georgia and South Carolina, and when it was discovered that the rich bottom lands of Alabama, Mississippi and Louisiana produced even better cotton than the upland districts of South Carolina, there was a rush of settlers to the river valleys of the new region. In 1811, fifteen-sixteenths of the cotton raised in the United States was grown in Virginia, North Carolina, South Carolina, and Georgia; in 1820, one-third of the total crop of 600,000 bales was raised in Alabama, Louisiana, Mississippi and Tennessee. In the western part of the cotton belt, as in the eastern, the planters directed practically all their capital and labor to the production of cotton, relying on the region north of them for provisions and live stock. The market for the grain, pork and flour of the Ohio Valley was greatly enlarged. Flat-boat men disposed of their cargoes of food products at the wharves of the plantations along the Mississippi River; flat-boat stores peddled clothing, boots and shoes, household furniture and

agricultural implements from village to village and from plantation to plantation; great droves of horses and mules were driven into the Southern States in response to the demand for draught animals for use in the cultivation of cotton.

As the western farmers enlarged the volume of their sales to the southern planters they increased their purchases from eastern merchants. A large part of the foreign imports of the United States, which in 1816 reached the unprecedented amount of $155,000,000, was sold in the West. Attracted by the cheapness of the goods offered and full of confidence in their ability to meet all debts with the proceeds of the lucrative southern trade, the people indulged in extravagant overtrading. Purchases far exceeded sales and the specie coming from the South was drained away as fast as it was received, but dozens of banks furnished a supply of currency by means of copious issues of paper money, and the career of extravagance proceeded. The internal trade of the country had never been so prosperous.

The era of good times came to a sudden end in 1819 when the nation was visited by a disastrous money panic. Nearly all the specie had been shipped abroad, and large sums of paper money had been issued, much of it on credit of a questionable nature. The general commercial expansion following the war had led to extensive speculation all over the country. When the new United States Bank suddenly began a vicious and relentless campaign against all other banks of issue in an ill-advised effort to force them immediately to a specie basis, loans were called in everywhere, the circulation was greatly contracted, prices fell, manufacturers and merchants were unable to meet their obligations, factories shut down, mercantile firms went into bankruptcy, banks closed their doors, and business everywhere was completely prostrated. To make matters worse, the export price of the great "money crop," cotton, fell from 32 cents in 1818 to 17½ cents in 1820. The provision market of the western farmers was greatly injured and thus planter, farmer, merchant, manufacturer and banker all succumbed before the general catastrophe.

The panic gave a sharp check to extravagance and speculation, importations declined, prices were readjusted and business soon began to recover. By 1823, the country seemed to have been restored to its former prosperous state and manufacturing in particular was more active than it had been at any time since the war.

Notwithstanding the revival of manufacturing and domestic trade,

the farmers of the grain states found themselves in distressing circumstances. The Ohio Valley was yielding a product far in excess of the demands that existed and each year found a large amount of unmarketable grain left in the fields and granaries. Many foreign nations refused admittance to American food products and though the grain-growing capacity of the United States had increased sixfold since 1790, the annual exports of grain, meat and flour were but little more than the average for the five years from 1790 to 1795. The plantations of the South were drawing much of their subsistence from the northern farms, but they were unable to absorb more than a small fraction of the tremendous surplus that was seeking a market.

Agricultural interests sought urgently for relief. Since there was no foreign market for their surplus, they resolved to *create* a home market. If England would not buy food products from the United States, the United States must refuse to buy manufactures from England, and must, by the establishment of manufacturing industries at home, give rise to a non-agricultural population that would consume the redundant supplies of meat and grain. The problem of attracting capital to manufacturing enterprises, the farmers proposed to solve by the creation of a system of protective tariffs that would check importations and encourage investment in mills and factories at home. Manufacturing industries already in existence were in no apparent need of protection and the shipping interests of Boston and New York and the cotton planters of the South strenuously opposed the protective policy. But the agricultural interests were not to be denied. Under the leadership of Henry Clay, the tariff of 1824 was enacted and the "American System" was inaugurated. In 1828, in response to an appeal, emanating from the woolen manufacturers and seconded by the agricultural interests, still further encouragement was given to home manufactures.

While the country was being agitated by the tariff controversy and exceptionally bitter political contests, the New York canals were opened for traffic throughout their entire length (October, 1825). No other single work in the United States has ever had a more beneficial effect on the prosperity of internal trade. The opening of the canals brought to an end what had been the bane of internal commerce for half a century—the excessive cost of freight transportation. Freight rates between Albany and Buffalo were at once reduced 90 per cent and the day of the freighter on the Genesee road was ended. The new canal wrought a complete change in all the rural districts of

western New York. Lumber, staves, ashes, grain and vegetables, hitherto unmarketable, were now shipped to the markets of the East; farm values doubled and quadrupled; a stream of people poured into the fertile farming regions around Lake Erie. Not less valuable was the new waterway to the district at its eastern terminus. The laboring population of the growing manufacturing towns reaped immense benefits from the cheaper and better means of subsistence they could now secure, while the shipments of merchandise westward on the canal exceeded in value the receipts of raw produce at tidewater. New York had achieved economic unity at a single stroke.

The success of the Erie Canal and the rapid growth of internal trade which followed the adoption of the "American System" caused a demand everywhere for more roads and canals and a widespread agitation in favor of government aid to internal improvements. The federal government gave extensive aid to private and state enterprises in the way of land grants and stock subscriptions, though it did not engage directly in the construction of commercial highways. The individual states embarked in schemes of canal and turnpike building which involved them in debts of millions of dollars. Ohio and Indiana began to construct canals joining the Ohio River to Lake Erie in order to secure the advantage of the new outlet to the East. Pennsylvania, awakened to the danger of the total loss of western trade through the state by the fact that shipments of merchandise to the West were abandoning the wagon roads from Philadelphia, Baltimore, and New York in favor of the cheaper route by way of the Erie Canal, began, in 1826, an extensive system of canals to connect the Delaware River with the Ohio River and the Great Lakes. Not to be outdone by their rival states, Maryland and Virginia agreed upon the construction of a canal from Chesapeake Bay to the Ohio River, and on July 4, 1828, President Adams dug the first spadeful of earth to signalize the beginning of the undertaking. Some financiers of Baltimore, dubious of the success of an effort to build a waterway over the difficult route adopted by the promoters of the Chesapeake and Ohio Canal, withdrew their support from that enterprise, and putting their confidence in a new and almost untried transportation device, which they believed would prove superior to canals, just as canals had proved superior to turnpikes, they boldly inaugurated the plan of a railroad from their city across the mountains to the Ohio, and Charles Carroll, of Carrollton, placed the stone that commemorated the beginning of its construction on the same day

that President Adams officiated at the rival celebration that marked the beginning of the canal.

Thus by 1830, the future of the internal commerce of the United States was assured. The adoption of the "American System" could have but one result—a tremendous expansion of domestic trade. That this expansion had already commenced was evident from the fact that notwithstanding the vast growth in wealth and population from 1820 to 1830, the imports of the United States had exhibited but little increase. "The nation was building an empire of its own with sections which took the place of kingdoms."[3] New England, New York and Pennsylvania were manufacturing the clothing and iron utensils for the West and South. The people of the South were absorbed in cotton raising. They relied upon the West for much of their food and live stock; they bought their clothing and machinery from the North Atlantic States; and their exports brought in the specie which facilitated the commerce of all sections. The West was becoming a vast granary. Its new factories were drawing artisans from the East and taking laborers from the country to swell the demand for flour and grain that had recently been seeking in vain for a market. The volume of shipments of food and merchandise down the Mississippi was larger than ever and the manufacturing population of the East, already too large to be fed by the agricultural produce of New England, New York and Pennsylvania, was beginning to draw subsistence from the western farms.

Means of cheap transportation, the lack of which had been so great an obstacle to internal development, had been or were being supplied to meet the requirements of the new conditions. The steamboat arrivals at New Orleans numbered a thousand each year. Water communication between the Atlantic Ocean and the very center of the United States was established when the Erie Canal connected the Hudson River to the waterway afforded by the series of great inland seas. There were 1,343 miles of canals in operation in all the United States, and 1,828 miles more were in the process of construction. Louisville was rejoicing in the completion of a canal around the falls of the Ohio; Ohio and Indiana were rapidly pushing the work on the canals that were to tap the regions hitherto tributary only to the Mississippi; the construction of the Pennsylvania Canal was being hurried forward to enable Philadelphia to recover the trade lost to the Erie; Maryland and Virginia were persistently going on with the

[3] F. J. Turner, *Rise of the New West*, p. 297.

building of the waterway westward from Chesapeake Bay. And meanwhile 44 miles of railway had been completed and were in operation, and to show that confidence in the new device was not lacking, 422 miles were in the process of construction and 697 miles more were already projected.

II

1830–1860

The years between 1830 and 1860 witnessed a remarkable expansion of the United States in area, population and wealth. By the annexation of Texas and by treaties with England and Mexico, nearly a million square miles of territory were added to the national domain and the western boundary was pushed to the Pacific Ocean. The total number of people increased in the thirty years from 12,866,020 to 31,443,321; the total wealth from about $2,000,000,000 to more than $16,000,000,000. It was a period of great prosperity for all branches of industry. As the tide of settlers swept over the fertile lands drained by the Mississippi River and Great Lakes, the agricultural production of the country increased with amazing rapidity. The production of corn in 1859 was almost 1,000,000,000 bushels; of wheat and oats 175,000,000 bushels each, and of cotton 4,300,000 bales, while the live stock of the country that year, including, among other animals, 25,000,000 cattle, 22,000,000 sheep and 33,000,000 swine, was valued at $1,000,000,000. The exploitation of the mineral resources of the nation was carried on more rapidly. From 300,000 tons of coal mined in 1830, the quantity grew to 13,000,000 tons in 1860; the iron mines turned out 1,000,000 tons of ore in 1860, the copper mines 7,000 tons and the lead mines 15,000 tons, while the production of gold in the far West, which began in 1849, averaged $55,000,000 annually during the following ten years. Manufacturing likewise grew in importance, the value of its products rising to nearly $2,000,000,000 in 1859. The tendency toward a territorial division of industry was accentuated during this period. Cotton cultivation became more than ever the dominant industry of the entire South; most of the manufacturing was done in the New England and Middle Atlantic States; the Northern Central States were devoted primarily to the production of grain and live stock.

The development of the country was accompanied by the construction of transportation facilities to care for the expanding trade. A

large number of important canals were completed; the Ohio River was joined to Lake Erie; Pittsburgh and Philadelphia were connected by a rail and water line; the Illinois River was connected with Lake Michigan at Chicago; the St. Mary's Falls Canal was built to aid the navigation of the Great Lakes, and many other waterways of lesser importance were constructed. Railroads grew rapidly in favor and as time went on they were built in increasing numbers and the construction of canals was practically abandoned. Before 1840 over 2,800 miles of track were laid and by 1850 the mileage amounted to 9,000. The decade from 1850 to 1860 was a period of extensive railway construction, especially in the Northern Central States, where more than 10,000 miles were built. Early in the decade the trunk lines of the Eastern States were pushed across the mountains and through railway connection was established between the Mississippi Valley and the Atlantic Ocean. New York was connected with Chicago by a direct rail route in 1853, and with St. Louis in 1855, and in 1858 a railroad reached the Missouri River. In the South, roads were built into the interior from all the important cities on the Atlantic and Gulf coasts. In 1860 there was a total of 30,626 miles of railroad in the entire country.

With the growth of population and wealth, the diversification of industry and the development of canals and railroads, there was a great increase in internal commerce. The trade of this period consisted of a few well-defined currents flowing between certain sections. A large volume of products, mainly agricultural, went from the Central States to the East, and a traffic of less volume but of greater value moved in the reverse direction. There was a heavy internal movement from the Northern to the Southern States and a light movement from the South to the North. Aside from these movements, there was an over-land trade by pack-horse and wagon with the Far West which became of particular importance after the discovery of gold. For the sake of greater clearness, these different currents of trade will be considered separately in the order named.

1. TRADE BETWEEN THE EASTERN AND CENTRAL STATES

One of the notable features of the internal commerce following 1830 was the rise of the trade on the Great Lakes. After the opening of the Erie Canal there was a large migration to the lands around the lakes; in a few years thousands of acres of land were cleared and put

under cultivation; the center of cereal production shifted westward; and hundreds of shiploads of grain were borne over the lakes toward eastern markets. Ohio was the first state west of New York to ship grain over the lakes. By 1835, Indiana and Michigan were sending grain eastward over Lake Erie; in 1836 the first shipment from Lake Michigan was recorded; in 1838 a shipment of 78 bushels of wheat from Chicago marked the beginning of the cereal trade of that city, and in 1841 the first exportation of Wisconsin wheat left the harbor of Milwaukee.

The growth of the lake grain trade was exceedingly rapid. As soon as the Ohio Canal was completed (1832) there was a diversion of traffic from the Mississippi River to Lake Erie, and as early as 1838, the receipts of western wheat and flour at Buffalo were larger than the receipts at New Orleans. The repeal of the English Corn Laws in 1846 gave a great stimulus to cereal production in the United States. As the population of the Central States increased and as canals and railroads were built to connect all parts of the cereal belt with the lake cities, the lake grain trade constantly swelled in volume. In 1860 the receipts of grain by lake at Buffalo, Oswego, Dunkirk, Ogdensburg and Cape Vincent amounted to 62,000,000 bushels. The shipment from Lake Michigan ports that year were 43,000,000 bushels, half of which came from Chicago alone.

Though grain and flour constituted the most important part of the eastbound lake traffic, there was at the same time a considerable trade in other commodities. Large quantities of pork, bacon, beef, lard, and other provisions were sent to Buffalo for distribution eastward; hides, wool, whiskey and live stock formed an important part of the traffic. Millions of feet of lumber were transported annually from Michigan and Wisconsin to all the other lake states; the shipment of copper from Lake Superior began in 1845, and the iron ore traffic began ten years later.

The westbound shipments over the lakes were also large and valuable. In 1836, $9,000,000 worth of merchandise was sent to western states over the Erie Canal and the lakes, and by 1854 the amount reached $94,000,000. After the latter year there was a rapid decline in the merchandise traffic over the canal and lake route because of railway competition. The shipments to the West consisted mainly of dry goods, clothing, machinery, railroad iron, drugs, imported foodstuffs, household furniture, salt and coal.

The trade over the Great Lakes and Erie Canal was without doubt

the most important feature of the commerce between the Atlantic States and the interior of the country between 1830 and 1860, but this route by no means absorbed all the traffic. The Main Line of the Pennsylvania canal system, completed in 1832, made it possible for Philadelphia and Baltimore to retain some of their trade with the cities of the Ohio Valley, but this trade, like the wagon trade preceding it, was largely one-sided, the westbound movement of light merchandise exceeding the eastbound movement of agricultural produce. The inclined planes which carried the traffic across the mountains proved to be an expensive and cumbersome device, and because of a lack of better transportation facilities, the trade of Philadelphia and Baltimore suffered constant losses, and for a time it seemed that New York was destined to monopolize the entire commerce between the Atlantic coast and the trans-Appalachian region.

In 1841, however, this situation was modified by the entrance of a new factor—the Western Railroad, the completion of which gave through rail connection between Boston and Albany. Because of its isolated position Boston had not shared in the direct trade with the Central States, but had been compelled to buy and sell through the merchants of New York and Philadelphia. The new railroad completely altered the position of Boston and brought an era of great prosperity to the city, at the same time demonstrating the practicability of the steam road as a carrier of nearly all kinds of freight.

The immediate success of this road was a signal for the beginning of more extensive railway construction, and the decade from 1850 to 1860 witnessed the entrance of the trunk line roads as competitors with the canals for traffic between the East and the West. The failure of the Pennsylvania Canal and the growing prosperity of Boston incited the people of Pennsylvania to take decisive steps to win back some of the trade lost by Philadelphia and in 1846 the Pennsylvania Railroad Company was chartered for the purpose of completing steam railway connection between Philadelphia and Pittsburgh. By 1854, this line, the Erie, the New York Central and the Baltimore and Ohio all reached the Ohio River or Lake Erie. During the next six years these four lines took over two-thirds of the flour traffic and practically all the merchandise and live-stock traffic between the eastern cities and the trans-Alleghany region, leaving to the Erie Canal the forest products and grain. In addition to capturing a large share of the canal freight the railroads easily secured most of the traffic that was accustomed to go from the cities along the Ohio

River to the eastern coast and to Europe by way of New Orleans. The lakes and canals had previously made some inroad on the commerce down the Mississippi, but notwithstanding their influence the river cities of Ohio and Kentucky continued to send the largest part of their exports southward until the railroads gave them a through route to the East. After 1855 the shipments down the river from Cincinnati and other important ports on the Ohio shrunk rapidly in volume and even before the war broke out their commerce with the East was much larger than their river trade to the South.

While the railroads in the North were making such marked changes in the course of internal trade, a similar transformation was occurring in the South. Trade between the eastern and western sections of the cotton states before 1849, aside from some traffic in slaves, was almost negligible. In 1849 when the Western Atlantic Railroad began to run trains from Chattanooga to the Atlantic coast, the planters of Northern Alabama and Tennessee, who had always sent their cotton to New Orleans and Mobile, turned to the markets at Charleston and Savannah. The cotton receipts at those two ports doubled in a single year, while the receipts at New Orleans fell off nearly 100,000 bales. The shifting of the center of cotton production farther westward enabled New Orleans to make up for its losses, but the South Atlantic ports easily maintained and increased their trade. They also competed with New Orleans and the cities on the Ohio River for the merchandise trade of Alabama, Mississippi and Tennessee, and the provisions for Georgia and South Carolina began to enter the states overland from the West, the coasting trade on the Atlantic seaboard both gaining and losing by the changes.

2. TRADE BETWEEN THE NORTH AND SOUTH

The general character of the internal commerce between the North and South, between 1830 and 1860, differed but little from what it had been before the former year. There were no through rail connections between the two sections until near the close of the period, and consequently almost the entire commerce, aside from that in slaves and live stock, consisted of the trade on the waters of the Mississippi River system.

This was the golden age of the river trade. Each year it grew steadily in volume, reaching a point of prosperity in 1860 never equalled before or since. Until the railroads began to divert the

traffic in flour and provisions after 1850, the cities on the Ohio River sent most of the produce collected at their markets to New Orleans to be shipped to Europe and the Eastern States or to be sold to the planters of the cotton belt. After 1850, as the surplus agricultural produce of the Ohio Valley was diverted from the river, its place was taken by that coming from the fertile region around St. Louis, where thousands of immigrants were settling in new homes. Moreover, the loss of traffic in agricultural produce from Pennsylvania, Ohio and Kentucky was compensated for by the increasing volume of manufactured goods and coal coming down from Cincinnati, Louisville and Pittsburgh. Thus the downstream traffic from the Northern States, though suffering a heavy relative loss, made an absolute gain, and with the enormous amounts of cotton shipped down the river added to this traffic, the Mississippi carried considerably more produce to the sea than either the Hudson River or the eastern roads. As before 1830, the trade up the river failed to keep pace with the movement downstream. Of the shipments upstream, 75 per cent consisted of articles previously sent down and resold to planters of Mississippi, Louisiana and Arkansas. The district north of these states bought some sugar and coffee of New Orleans, but drew practically all its manufactures and other imported goods from the East.

The value of the receipts of produce at New Orleans advanced from $22,000000 in 1830 to $185,000,000 in 1860. The largest part of the increa,se resulted from the growth of the cotton trade. The receipts of "Western produce," which in 1820 formed 58 per cent of the commodities entering New Orleans, constituted only 23 per cent of the total receipts in 1860. But though showing a relative decline, the receipts of foodstuffs and merchandise had a steady aggregate increase. As a cotton market, New Orleans had no close rival. Its receipts of this great staple in 1860 amounted to $109,000,000.

St. Louis was the city of next importance on the Mississippi. Until after 1855, St. Louis remained strictly a river city, almost entirely dependent upon the Mississippi and its tributaries for both the importation and exportation of the flour, grain, meat, tobacco, lead and other goods that entered and left its busy markets. After the city secured railway connection with the East in 1855 a large part of the traffic entering from that direction was transferred to the railroads, and some of the traffic leaving the city was diverted from the southern river route to the eastern railway route. However, the volume of trade taken from the Mississippi was not large at first and the move-

ment of commodities southward showed no marked decline until the outbreak of the Civil War.

Next to the river trade, the trade in live stock and slaves was the most important element in the internal commerce between the North and the South. Each year large droves of horses, mules, cattle and hogs were driven into the South from the Northern and "border" states, the farmers all over the corn-raising section finding an unfailing source of gain in the demand for live stock in the southern cotton fields. The domestic slave trade commenced to be of importance after 1820, when cotton culture spread among the Gulf States. Slaves were bought in South Carolina, Georgia, Alabama, Mississippi, Louisiana, Arkansas and Texas, and exported from Virginia, Maryland, North Carolina, Kentucky, Tennessee, Missouri and Delaware. Though no statistics of the volume of the internal slave trade exist, evidence from contemporary accounts indicates that it was unquestionably extensive, probably reaching a value of $30,000,000 a year in the late fifties.

3. TRADE OF THE FAR WEST

Long before Texas and the California territory became a part of the United States, enterprising merchants on the western frontier began a merchandise trade with the Mexican settlements in what is now New Mexico. By 1843 this trade reached an annual value of $500,000. After the occupation of the territory by the United States troops it became much larger, reaching a total value in 1860 of $3,800,000. The chief shipping points were Independence and Kansas City, Missouri. Transportation was supplied by regular freighters who employed a large number of men to conduct the white-topped prairie schooners across the unsettled plains between the Missouri River and the mountains. New Mexico paid for its imports with bullion and wool produced in the territory, or with money secured by the sale of sheep driven to California, or by the sale of a scanty agricultural produce to government military posts and Indian agencies.

In addition to the wagon trade with New Mexico, the Missouri River cities carried on a similar trade with Utah after its occupation by the Mormons in 1848. When gold was discovered in Colorado in 1859 there was an immediate rush of settlers to that territory, which was accompanied by the rise of a large trade in tools and provisions. There was no regular overland freight traffic to the Pacific coast, the commerce of California with the rest of the country, aside

from the sheep trade with New Mexico, being carried on around Cape Horn or across Central America. Within California itself there was an extensive trade between San Francisco and the agricultural, lumbering and mining districts of the surrounding regions.

4. CONCLUSION

The expansion of the volume of the internal trade of the United States during this epoch more than justified the expectations existing at 1830. The improvement of the facilities for communication and transportation, permitted a continually increasing accentuation of a territorial division of labor which fostered the growth of mutual dependence between regions where geographic, social or other conditions led naturally to the predominance of a special type of industry. The manufacturing and commercial population of the Northeast was fed by the farm products of the Central States and the inhabitants of the Central States drew their imported supplies, their clothing, shoes and large quantities of other manufactured goods and general merchandise from the Eastern markets. The South relied upon the North for food, manufactures and imports. The North in turn bought from the South raw materials for its cotton and sugar industries, and the Northern shipping interests carried to European markets the heavy exports of Southern cotton, the proceeds from which paid the Southern debts in Northern States and settled the large unfavorable balance of the Northern foreign trade.

The multiplication of factories in the North together with the spread of cotton culture in the South and the opening of foreign markets to American grain brought about the demand for cereal products, which the agricultural interests had been so anxious to create. When the market problem was solved, the tariff duties were reduced to a revenue basis.

In the solution of the transportation problem the people freely used their political institutions. Nearly all the numerous canals built after 1825 and several of the early railroads were public enterprises, undertaken by state governments. However, the states proved unable to cope with the problem of administering their railways and canals, and surrendered the field of transportation to private corporations, which were helped to carry out the work by generous and munificent gifts of land and money from federal, state and local governments.

Unfortunately the federal government did not attempt to establish a satisfactory currency system. In 1837 and again in 1857 the country was visited by a financial panic due in a large measure to extravagant speculation, much of which would have been impossible had the issue of money been properly regulated.

On the whole the period from 1830 to 1860 was one of great prosperity and contentment. The wealth of the nation grew enormously and for the most part it was equally distributed, there being few paupers and still fewer very rich individuals. The twenty years following 1840 have been called the "golden age" of American history, and as far as concerns the diffusion of material comforts they certainly deserve the name.

Notwithstanding the great material prosperity however, the flames of sectionalism, which had blazed forth during the contest over the adoption of the "American System" remained unquenched even after the question of protection had ceased to be an important political issue. Filled with animosity engendered by the thought that the economic progress of the North had been effected at the expense of the South, and fearful that the fulminations of the abolitionists and the successful efforts of the Northern political leaders to restrict the territorial expansion of slavery only foretold an ultimate intention of destroying that institution altogether, the Southern partisans decided to sever the political bonds between the two sections, the economic institutions of which differed so widely, and to establish a separate state whose political ideals would conform to its economic and social predilections. This decision the Southerners stood ready to enforce by an appeal to arms; the people of the North, preferring "to accept war rather than let the nation perish," made ready to prevent the proposed dissolution of the Union; and the era of general happiness and comfort ended amid the preparations for the impending struggle.

III

1860–1900

The Civil War marked a notable turning point in the economic history of the United States. National development since 1860 has been shaped to a large degree by fundamental political and economic changes that occurred during the war—changes which were for the most part the effect of various expedients resorted to by the federal government to bring the struggle for the preservation of the Union to a

successful issue. To crush the military strength of the South the federal authorities adopted the expedient of the abolition of slavery, and to the surprise of both the North and the South "the cause of the conflict ceased before the conflict itself," and the nation emerged from the war freed of the greatest obstacle to its social homogeneity. To secure revenue for the prosecution of the war, the duties on imports were raised to an unprecedented point, and when Congress failed, after the return of peace, to reduce the tariff schedules to their former level, manufacturing interests found themselves protected by a tariff wall so high that foreign competition was largely eliminated. To secure needed aid in financing the costly struggle, Congress established the national banking system which gave greater uniformity to the currency and brought the financial centers of the country into closer relation. The anxiety to connect the Atlantic and Pacific coasts by rail led the federal government to adopt the practice of granting large subsidies to the builders of great transcontinental railway lines. The stimulation which the war gave to manufacturing and transportation in the North and the shrewd manipulation of the money market during the years of the national crisis made possible the accumulation and concentration of large quantities of capital funds under the control of a small number of persons.

It was inevitable that such radical changes would modify the course of industrial progress. Because of the importance of slavery as the underlying cause of the war, there has been a natural tendency to regard its abolition as the most striking and significant net result of the great conflict, but it is to be doubted whether the emancipation of the negro had as great an effect on subsequent economic development as the other innovations, which were so obscured by the turmoil of the war that they received but little attention and were regarded as being of much less significance. The complete transformation in the tariff policy of the nation permitted the growth of manufacturing to an extent that would have been impossible had the war not occurred; the construction of the transcontinental railroads had an immeasurable effect on the development of the great region west of the Missouri river; the concentration of capital provided the means by which industrial enterprises could be carried out on a gigantic scale; the establishment of a uniform currency and a better banking system accelerated the growth of industry and trade. It is in these changes that one finds the key to much of the economic history of the United States since the Civil War.

The period from 1860 to 1900 was one of development and exploitation. The years prior to the Civil War had been marked by the advance of the political dominion of the United States to the Pacific Ocean, and at the same time the nation had enjoyed an era of notable agricultural, industrial and commercial prosperity, especially in the states east of the Mississippi River. However, the tremendous possibilities of the country were only beginning to be realized in 1860, and remarkable as was development before that year, it was completely eclipsed by the amazing progress made during the latter part of the century. An abundance of unoccupied land, of rich and varied natural resources, favorable climatic conditions, a complete absence of checks on individual initiative and enterprise and of restrictions on internal communication and trade, and the encouragement afforded to industry by the liberal policies of the federal government all combined to create economic opportunities of boundless scope. Labor, capital and transportation facilities alone were needed and as these increased the wealth production of the United States multiplied with astonishing rapidity. The extension of the railway system permitted the constant growth of agriculture and rendered accessible the mineral and forest products in which the land abounded; cheap and plentiful raw materials from field, mine and forest, made possible a phenomenal increase of manufacturing. Multitudes of European immigrants, eager to share in the wealth of the new world, poured in and recruited the labor force necessary for the industrial conquest; and the invention and application of labor-saving machinery of every description increased many fold the effectiveness of the effort of each individual. All parts of the country participated in the material progress. The South, issuing quickly from the almost abject state of prostration in which it was left by the ravages of a disastrous war, became more prosperous and flourishing than ever; the Northern States east of the Mississippi constantly increased their agricultural production, and at the same time became one of the greatest manufacturing and mining districts in the world; on the prairie lands west of the Mississippi a new cereal kingdom was founded; the western plains were converted into great live stock ranches; the forests, orchards and grain fields of the Pacific States proved to be an even greater source of wealth than were their mines of gold and silver.

In the forty years following 1860 the number of people in the United States, exclusive of outlying possessions, rose from 31,000,000 to 76,000,000, the wealth of the nation grew from $16,000,000,000 to

$89,000,000,000. These figures convey some idea of the progress of the country as a whole. Such an advance was possible only by the most rapid expansion of all the numerous lines of industry to which the resources and energies of the nation were devoted.

The growth of agriculture proceeded on a magnificent scale. Within two decades after the war the United States assumed the leading place among all nations of the world in the production of grain and live stock, maintaining at the same time its supremacy as a producer and exporter of cotton and tobacco. Countless thousands of acres of virgin soil west of the Mississippi River were given away under the provisions of the famous Homestead Act of 1862 and by 1880 the continent was practically settled from one coast to the other. The area of farm lands increased from 407,000,000 acres in 1859 to 841,000,000 acres in 1899, and the value of farm property rose from $8,000,000,000 to $21,000,000,000. The application of machinery to the cultivation of the soil and the substitution of horse and steam power for manual labor multiplied the productivity of each unit of land and labor. In 1899 the country produced from its fields 4,500,000,000 bushels of cereals, 9,500,000 bales of cotton, 79,000,000 tons of hay and 868,000,000 pounds of tobacco. The value of the live stock that year was $3,000,000,000, and the production of dairy products, poultry and eggs amounted to $750,000,000.

The output of the mines increased in value from $219,000,000 in 1869 to $1,107,000,000 in 1899. Over 240,000,000 tons of coal, 27,000,000 tons of iron ore, 270,000 tons of copper, and 63,000,000 barrels of petroleum were taken from the earth during the latter year.

The most significant feature of the economic history of the United States between 1860 and 1900 was the rise of manufacturing. The radical change in tariff policy, the rapid expansion of the home market due to the tremendous growth of agriculture and the spread of railroads, and the presence of an unlimited amount of cheap fuel and raw materials all combined to make manufacturing in some respects the dominant industry of the country. The value of the products of manufactures in 1899 reached a total of $13,000,000,000.

Simultaneously with the expansion of agriculture, the exploitation of natural resources and the rise of manufacturing, partly as an effect of them but almost equally as a cause, came the development of the great transportation system. This was the era of the railroad. Immediately after the war there began a period of extensive construction,

over 35,000 miles of line being laid between 1865 and 1874. The first transcontinental line was completed in 1869. Unfortunately the enormous increase of mileage during these years was considerably in excess of the needs of the country, and the speculative fever which attended the expansion resulted in the panic of 1873. After a period of depression of five years there was a second and much greater revival of construction. Between 1878 and 1890 over 85,000 miles of new track were laid, including four transcontinental tracks completed and others partially finished. By 1900 there were 199,000 miles of railroad spreading a vast net over the entire country.

The important result of the growth and improvement of railways was the great reduction in the cost of transportation. At the close of the period before the war it had been demonstrated that railroads could economically carry high grade freight such as flour, live stock, lighter manufactured goods and general merchandise, but as yet they had been unable to compete successfully with waterways for the transportation of grain, and the carriage for long distances of such low-grade freight as coal and ore had not been attempted. As the railway developed, however, its use was extended, and it was soon found that there was no commodity so cheap that it could not be profitably handled. Accompanying the extension of the service to include all kinds of bulky freight there was an uninterrupted decline in the general level of rates on all classes of goods, resulting from the increased efficiency of roads, the stress of competition, and above all from the tremendous increase of traffic. The rate per ton per mile decreased from 1.92 cents in 1867 to 0.73 of a cent in 1900. This reduction of transportation charges was one of the most potent factors determining the course of economic progress. Field, mine, forest and store were linked together into a unified whole; raw materials could be concentrated at any point and there was practically no limit to the extent of the market for finished commodities. The increase of the tonnage of railway freight from less than 20,000,000 tons in 1860 to almost 600,000,000 tons in 1900 is the best index of the growth of internal trade during this period.

As the railways increased in importance, transportation on most of the inland waterways declined. Nearly 1,700 miles of canals were abandoned between 1860 and 1900. After 1880 there was a gradual decrease of nearly all canal and river traffic. The Great Lakes were practically the only inland waterway that retained an important position in internal trade. The unusually favorable conditions pre-

vailing for the growth of traffic on these bodies of water enabled their commerce to thrive and expand at a rate which compared favorably at all times with the growth of railway traffic.

Commerce has been aptly defined as "taking things from where they are plentiful to where they are needed." This being true, the volume of internal commerce of any country must depend upon the number of its people, the total volume of its production, the sectional diversity of its products, the efficiency and cheapness of its transportation, and the freedom from foreign competition in the sale of native commodities in home markets. In the economic progress of the United States from 1860 to 1900, there was a continuous and rapid development of all the requisite factors for the existence of a large internal trade. Population more than doubled, annual production per capita quadrupled, the diversification of industry became more pronounced and the transportation system developed to a degree that afforded the utmost fluidity of movement of all articles of trade. Furthermore, the range of movement of internal trade was greatly widened by the settlement of the vast expanse of new country west of the Mississippi River.

The extent, volume and complexity of internal trade during this period render it impossible to attempt, within the scope of this paper, to give a connected account of its development. However, some idea of its wonderful expansion may be conveyed by the following brief statement of the growth of the movement of some of the most important commodities.

Cereals and Flour. The history of the internal grain trade from 1860 to 1900 centers around the receipts and shipments at the great primary grain markets situated on the Great Lakes and the rivers of the upper Mississippi Valley. In 1900 the chief surplus cereal area of the United States comprised a vast stretch of territory included in a semicircle described by a southern and western sweep of a compass moving on a radius extending from Duluth to Buffalo. Three-fourths of the 4,500,000,000 bushels of grain were raised in the twelve states embraced in this territory. The ten most important markets in the region, each of which was receiving annually from 10,000,000 to 300,000,000 bushels of grain, were Chicago, Minneapolis, Duluth-Superior, St. Louis, Milwaukee, Toledo, Kansas City, Peoria, Cincinnati and Detroit. From each of these points there radiated toward the South and West a network of railways over which grain came from the farming districts and over some of which there was a return

movement of flour and grain for domestic consumption or for exportation from Gulf ports, while stretching to the eastward were numerous rail and water lines by which an immense cereal and flour traffic was carried to the manufacturing districts and exporting cities of the Atlantic coast. In 1900 the ten markets named received about 850,000,000 bushels of grain, including flour, and shipped 650,000,000 bushels.

Live Stock and Meat. The extension of railroads to the grazing lands of the West and the tremendous increase of corn production in the Mississippi Valley after 1860 gave a great impetus to live stock raising. Like the trade in grain the trade in live stock centered around a series of great cities located centrally within easy reach of the producing sections on one side and of the consuming region on the other. To these primary markets the railroads carried thousands of car loads of stock—horses and mules for distribution among the farms and cities of the East and South, cattle, hogs and sheep for slaughter at the packing houses at the primary markets, for distribution among the farms of the Central States to be fattened for subsequent killing, or for shipment to the slaughter pens of Eastern cities.

Until 1863 Cincinnati was the chief meat packing city of the country, but in that year Chicago took the lead and has held it ever since, and as the live stock industry shifted westward, St. Louis, Kansas City, Milwaukee, Indianapolis, Omaha and St. Joseph in turn surpassed Cincinnati in the business. The trade in meat was revolutionized during this period by the introduction of the refrigerator car which made possible the transportation of fresh meat for any distance. The total value of the products of wholesale slaughtering and meat packing in 1900 amounted in value to $700,000,000, of which more than one-half was produced in three cities, Chicago, Kansas City and South Omaha. In Chicago alone 2,000,000 cattle and 22,000,000 hogs were packed. The chief market for the numerous products of the packing establishments was in the manufacturing districts of the East. The eastbound rail shipments of provisions from Chicago in 1900 averaged about 20,000 tons a week.

Cotton. The geographical limits of the cotton belt had been reached before 1860 and consequently there was no further extension, but the cotton acreage was increased from about 13,000,000 acres to more than 30,000,000 acres during the period. Texas in 1900 had over 7,000,000 acres of land devoted to cotton raising and seven more

of the thirteen states in the cotton belt each had an acreage of more than 1,000,000. The chief interior cotton markets in 1898 were Houston, St. Louis, Memphis, Augusta, Cincinnati, Atlanta, Little Rock and Shreveport. The city of Houston, through which passed a large part of the Texas crops, destined for export from Galveston, had the heaviest receipts amounting to 1,800,000 bales. St. Louis and Cincinnati owed their prominence to their position as natural gateways through which cotton passed to Northern markets from Texas and the lower valley of the Mississippi. Among the Southern seaports New Orleans held the lead in cotton receipts until 1899, when Galveston took first place. Together these two cities shipped nine-tenths of the cotton exported by the way of the Gulf of Mexico. On the Atlantic coast Savannah held the lead in cotton receipts. The trade of Charleston declined somewhat after 1880; Norfolk and Wilmington, of relatively small importance before the war, became large markets during this period, the former ranking next to Savannah after 1880.

The "overland movement" of cotton by rail to the North, which began in 1855, developed to large proportions after the war. This movement represented the results of the efforts of the railroads to secure a share of the traffic that had formerly belonged entirely to the coasting trade. The "overland" traffic originated in all the cotton states, most of it passing through St. Louis and the gateways on the Ohio and Potomac rivers to North Atlantic States to be sold to Eastern spinners or exported to Europe. In 1899 the all-rail movement of cotton amounted to 1,370,000 bales, as compared to a coastwise movement of 2,019,153 bales.

A noteworthy feature of the cotton trade of this period was the increase of cotton consumption in the South. After 1885 there was a rapid expansion of cotton manufacturing in several Southern States, and in 1899 their mills used 1,400,000 bales of cotton, only a third less than the number of bales consumed in Northern mills. The decline of cotton receipts at Charleston was largely due to the growth of cotton manufacturing in South Carolina, whose mills were consuming more than one-half of the annual product of the state at the close of the century.

Coal. Previous to 1860 practically all the coal shipped from the anthracite districts in Pennsylvania was transported to Philadelphia and New York where it was consumed or carried coastwise to points along the Atlantic seaboard. The movement to Eastern points con-

tinued to constitute the largest part of the anthracite trade after 1860, but a trade toward the West also sprang up. The chief route for this traffic was by canal or rail to Buffalo, from where it was distributed among other ports on the Great Lakes. Another important movement was to Pittsburgh, large quantities being shipped thither for distribution westward by rail.

Until the early sixties the production of bituminous coal was less than that of anthracite, but with the increase of manufacturing the production of the former increased rapidly and by 1900 the output, amounting to 190,000,000 tons, was nearly four times the output of anthracite. The great fields of Pennsylvania, West Virginia, Maryland and Ohio turned out much more than one-half of the bituminous coal mined during this period. From these fields there were large shipments in all directions. The Chesapeake and Ohio Canal and the southern trunk line railroads carried a heavy tonnage to the cities on the Atlantic seaboard; millions of tons were floated down the Ohio River; the railroads took immense quantities westward for consumption among the Central States, a large part of it being distributed by water from all the lake ports on the southern shore of Lake Erie. The second great center of bituminous coal trade was in the fields of Indiana, Illinois, Iowa, Missouri and Kansas, whence the numerous cities of that district drew most of their large fuel supplies. The third important center of production, which was developed very rapidly after 1885, was the Alabama and Tennessee field. It provided fuel for the growing manufacturing industries of the southeastern portion of the country and competed for the coal trade of points on the lower Mississippi.

Iron Ore, Iron and Steel. The development of the movement of iron ore from the mines around Lake Superior to the furnaces of the Eastern States was one of the most interesting features of the internal trade of the United States during this entire period. This trade grew in volume from less than 1,000,000 tons in 1870 to 18,000,000 tons in 1899, the shipments during the latter year comprising two-thirds of the total iron ore production of the whole country. Practically the entire traffic went by lake vessels to ports on Lake Erie and Lake Michigan whence it was taken by rail to the blast furnaces of Pennsylvania, Ohio, New York and Illinois.

No other industry in the United States had a more remarkable growth after 1860 than the iron and steel industry. The production of pig iron in 1899 was nearly 15,000,000 tons, and of crude steel

almost 11,000,000 tons. Pennsylvania contributed about one-half of the entire output of both pig iron and steel during the forty years, Ohio ranking second. The pig iron industry began to expand rapidly in Alabama and Illinois in the early eighties, and by 1900 the output of these two states constituted a fifth of the total product. The immense output of iron and steel was distributed everywhere throughout the country. A large part of it was used in building the railroads and the remainder was utilized as the raw material for the manufacture of a great variety of iron and steel products that were used in all branches of industry.

Lumber. The forests of the United States were subjected to a rapid and often wasteful exploitation during these years. Extensive building operations, the construction and maintenance of an enormous railway mileage and the growth of manufacturing created a heavy demand for timber, and by 1900 the annual cut amounted to 35,000,000,000 feet. The northeastern group of states which had formed the chief source of lumber supply before 1860, lost precedence by 1880 to the lake states, Michigan, Wisconsin and Minnesota. The tremendous consumption of timber throughout the country rapidly depleted the supply in this district and by 1900 the yellow pine of the South was being heavily drawn upon, forming a fourth of the production of the country. The timber lands of the Pacific coast contributed more than 2,000,000,000 feet a year after 1890, and the shipments of lumber and shingles from this region to the interior were beginning to take on very large proportions.

Manufactures. In 1859 the New England and Middle Atlantic States produced nearly three-fourths of the total manufactured products of the United States, and these two groups together with the Central States reported more than 80 per cent of the product of manufactures of each census year thereafter. In general, it may be said that the rest of the country was dependent upon these sections for its manufactured goods. The fact that over one-half of the product of 1899 came from five states, New York, Pennsylvania, Illinois, Massachusetts and Ohio, serves to designate still more clearly the chief centers of trade in manufactured goods. Of the fifteen leading manufacturing cities in 1899, twelve were located east of the Mississippi River and two were situated on its west bank. New York City alone produced in 1899 one-tenth of all the manufactures of the country and Chicago and Philadelphia together produced another tenth. The localization of many industries within the manufac-

turing belt itself was an important factor in determining the course of internal trade between the manufacturing states and the rest of the country and among the manufacturing states themselves, which were the largest consumers as well as the largest producers of manufactured goods. The increase in the value of the products of manufactures from $2,000,000,000 in 1859 to $13,000,000,000 in 1899 gives an idea of the expansion in the trade in manufactured commodities, the details of which it is impossible here to consider.

There were no other articles the movements of which equalled in importance those of the various commodities discussed above, but there were many that contributed a tonnage of large volume and value to internal trade. Dairy products, poultry and eggs, wool, hay, sugar, tobacco, fruits and vegetables from the farms, petroleum, gas, copper, stone and many other valuable mineral products, and the large annual quantity of imports of food products, manufactures and raw materials entering the seaports to be distributed among interior markets helped to swell the volume of traffic that moved from place to place within the country.

Conclusion. A most interesting and significant feature of the history of the United States during this period was the transition in the character of the economic problems of the country. Until the time of the Civil War its chief problems had been those of securing the means to develop its resources, of acquiring the facilities for transporting its products from place to place, and of providing markets in which its products could be sold. As capital, population and transportation facilities were provided to exploit the latent wealth of the continent it was found that out of their presence grew far larger and more vital problems than their absence had ever created. The economic difficulties of the nation after the Civil War arose chiefly because of the existence of the things which before 1860 it was a question of acquiring.

In no instance was this general proposition better demonstrated than in the railroad problem. For nearly sixty years of the nineteenth century the chief obstacle to internal trade had been the lack of the means of transportation. To overcome this difficulty the states had first built their own canals and railroads. Many of the state enterprises failing because of weak administration, the states had surrendered the management of railroads to private corporations, but the public continued to share in railroad construction through numerous grants of aid by federal, state and local governments.

For a number of years almost the only activity of the public in regard to railroads was to foster and protect the interests of the railroad companies. In the seventies the public gradually came to a realization of the fact that the railroad companies were displaying a lamentable lack of regard for the interests of the public. Persons and communities found themselves entirely at the mercy of railroad corporations, which, by vicious discriminations, built up and destroyed where they chose, and even endeavored to control arbitrarily the economic future of entire groups of states regardless of their natural advantages or the choice of their people. And not only did the railroad companies themselves become a source of danger, but they were instrumental in the creation and development of great industrial combinations, which were equally indifferent to the welfare of the general public The transportation problem of the United States was no longer that of providing facilities, but of controlling and regulating the existing facilities in such a manner that reasonable rates and services would be given to the public which had entrusted the business of transportation to private agencies. The demand for relief was first voiced in state legislation. The states being powerless to regulate interstate trade, the national government found it necessary to act, and, in 1887, the Interstate Commerce Law was passed, having for its chief purpose the prevention of unjust discrimination. As a regulative measure the law proved inadequate, its most important provisions being emasculated by court decisions, and the century ended with effective railway regulation unaccomplished.

No less pressing than the problem of regulating railroads, over which the internal commerce of the nation was carried on, was the question of regulating the great industrial combinations through which a large part of the buying and selling of the products of the country was controlled. The unfair advantages secured by large combinations because of their abundance of capital and the discriminating favors of railroads enabled them often to throttle competition and to establish monopolies that were a menace to the public. This situation likewise called forth federal legislative measures intended to prevent the monopolization of trade. Previous to 1900, however, but little application of the law was made.

To the tariff and to the currency the nation owed its most bitter political struggles after the reconstruction of the Union was accomplished. The net result of a half dozen efforts to modify the tariff was the existence, at the end of a century, of a tariff law in which the

general average of duties was 10 per cent higher than the average at the close of the Civil War. The currency system of the nation, with the exception of the improvement in banking, became worse instead of better after the war, the chief trouble arising because of the adoption of measures intended to satisfy insistent demands for a greater volume of money, without making provision for its retirement when business conditions were such as to warrant a contraction of circulation. A quarter of a century of struggle finally ended in the overthrow of the advocates of the unlimited issue of cheap money, but no attempt was made before 1900 to remedy the inelasticity of the national currency or to check the tendency toward a concentration of the control of credit in a few financial centers. In 1873 and in 1893 the country suffered from money panics, the latter one being due almost entirely to unwise financial measures that had virtually bankrupted the government and destroyed confidence in the money it issued.

The end of the century was reached with only a little headway made in the solution of the most vital economic problems. In striking contrast to the "golden age" of American history, noted for the absence of both pauperism and great riches, this period saw the development of the extremes of poverty and wealth, and, furthermore, an ever-growing tendency toward the concentration of the national wealth under the control of a few powerful interests. The disregard which too many of these interests evinced for the welfare of the general public and the power which they possessed to thwart the efforts of the public to protect itself created most of the great questions which confronted the nation—questions of such serious nature as to dim the record of achievement and material progress from 1860 to 1900.

However there was ample evidence that the national consciousness was beginning to take cognizance of much of the prevailing maladjustment and was awakening to a sense of duty—long undone. A growing sense of personal responsibility both on the part of those who suffered from existing conditions and on the part of those who profited by them was paving the way for a speedy application and a willing acceptance of a system of conservative public regulation of private business in which careful consideration would be given to the rights of all persons. In the intelligent realization of the meaning of the existing situation lay the basis of a clear perception of the proper steps to be taken and a strong hope for the immediate future.